

FABRICATION OF COMPLEX FIBER GRATING STRUCTURES BY
USE OF SEQUENTIAL WRITING WITH POLARIZATION CONTROL

ABSTRACT

The present invention provides a fabrication
5 method of complex fiber grating structures that can
be combined with prior fabrication methods
including a phase mask or a two-beam interferometer.
By using a rotatable half-wave plate with a
polarization beam splitter in the optical path and
10 precisely scanning the relative fiber position, we
can expose true complex fiber gratings in a single
scan by simultaneously rotating the angle of the
half-wave plate.